KDE Data System Portfolio Assessment

Executive Summary

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Executive Summary

Introduction

In 2009, the Kentucky Department of Education (KDE), through its Office of Education Technology (OET), contracted with the Commonwealth Office of Technology (COT) to conduct a portfolio assessment. Since the reorganization, OET has since been renamed the Office of Knowledge, Information, and Data Services (KIDS).

The assessment was set up within two phases. Phase 1 consisted of the evaluation of the three main data system within the OET/KIDS office. The recommendations were presented in May 2009. Upon contract extension in October 2009, COT began Phase 2 of the assessment evaluating all data systems within KIDS and presented the results in May 2010. Upon completion of OET/KIDS' results, Phase 2 expanded to include any known IT application which acquires, transforms, and displays or reports information within the entirety of the KDE offices (five additional offices). COT has organized the results and recommendations for Commissioner Holliday, KDE, and the additional five KDE offices (not including the results and recommendations previously presented to KDE's KIDS office).

The Executive Summary is a collaboration of recommendations pertaining to all five KDE offices evaluated (Office of Administration & Support, Office of Assessment & Accountability, Office of Guiding Support Services, Office of Next Generation Learners, and Office of Next Generation Schools & Districts). Please refer to the supplied portfolios for recommendations specific to each individual office.

KDE (Kentucky Department of Education) Recommendations

KDE Short-Term Recommendations

After analyzing the five KDE offices' data systems, COT recommends the following general recommendations for all offices:

1. COT recommends collaboration between program areas within each office and amongst all KDE offices to reduce or eliminate many of the district information requests. Staff in the program areas should determine mutually appropriate times and instruments to collect district data so that the information can be collected to fulfill requirements for multiple areas at the same time. This can provide efficiencies for KDE and the District staff who provide the information.

2. COT recommends that KDE confirm that the many data systems used are saved on a secure shared drive rather than on an individual's local computer. Having essential data available to only one individual could be problematic if that person leaves suddenly or becomes ill at a critical time.

3. COT recommends, also, transitioning some of these data systems to a more secure and accessible repository rather than desktops or local servers. One possibility for certain offices, such as ONxGL, would be a repository like SharePoint (with security and access rights set). This will enable secure access to the reports' users and enable more efficient organization and updating of information.

4. COT recommends that KDE evaluate the multiple Microsoft Excel systems and consider consolidating within a Microsoft Access database or FileMaker Pro (SQL/.NET) web-based system. Upon further analysis of each individual system, COT would be happy to assist in the evaluation of consolidation options.

KDE Long-Term Recommendations

Through analysis of the KDE offices, COT observed that one of the most robust systems available to the offices is Infinite Campus (IC), also known as Kentucky Student Information System (KSIS).
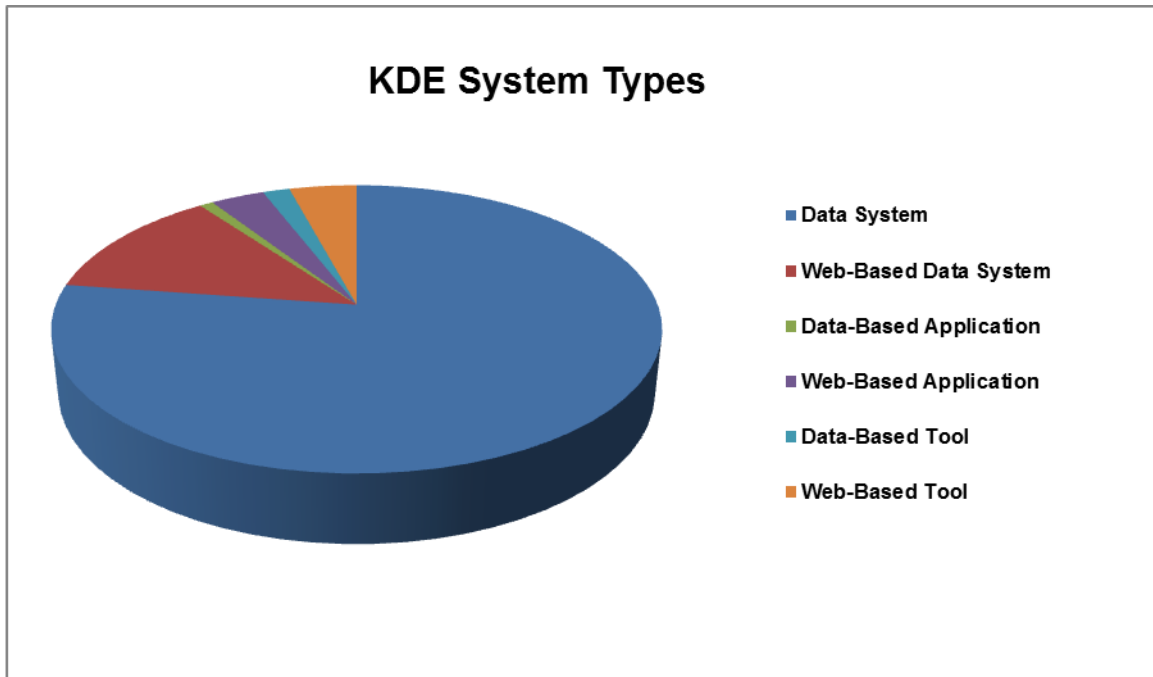
1. COT recommends further analysis of this system in conjunction with the KDE systems and reports. As the information obtained from Infinite Campus becomes more stable and accurate, further integration of KDE's data system functionality to Infinite Campus would be the ideal coordination of the systems in all of the offices throughout KDE. This could reduce much of the redundancy and duplication of effort observed.

2. COT recommends that KDE continue to work with Infinite Campus to increase the number of detailed data fields in the State Edition. This will reduce the number of requests (Word templates, Excel spreadsheets, etc.) sent to the districts for additional information so that program areas can accurately prepare reports. Further, it will reduce the KDE staff effort required to prepare federal reports and the number of redundant surveys and requests completed by district personnel. KDE staff will have more time to focus on ways to improve school, district and student performance.

3. COT observed that MUNIS, the districts' financial accounting and reporting system(s), will be upgraded in the near future. At present, KDE uses SEEK as the financial data repository, since there is no state-side accumulator for the districts' MUNIS data. KDE should investigate whether there is a way to easily have a 'state edition' accumulator of district financial information built into MUNIS.

4. Since OGSS involves mostly legal documentation, COT recommends a development or purchase of a Legal Module system to consolidate all of the multiple platforms of the Legal Documentation and Recording systems within the office.

5. COT has observed the contract in place with Infinite Campus, the available functionalities, and the requests thus far provided from the individual offices to develop specific functionalities. Currently, Infinite Campus has a phased roll-out, which will provide the functionalities requested throughout many of the KDE offices. COT recommends a more concise and organized manner of tracking these requests, the completion of the requests, and communication between the offices to update all areas on the progression of the requests and upcoming phased roll-outs (including online training for the increased functionality and an Infinite Campus bulletin that will go to all areas and individuals at least monthly).
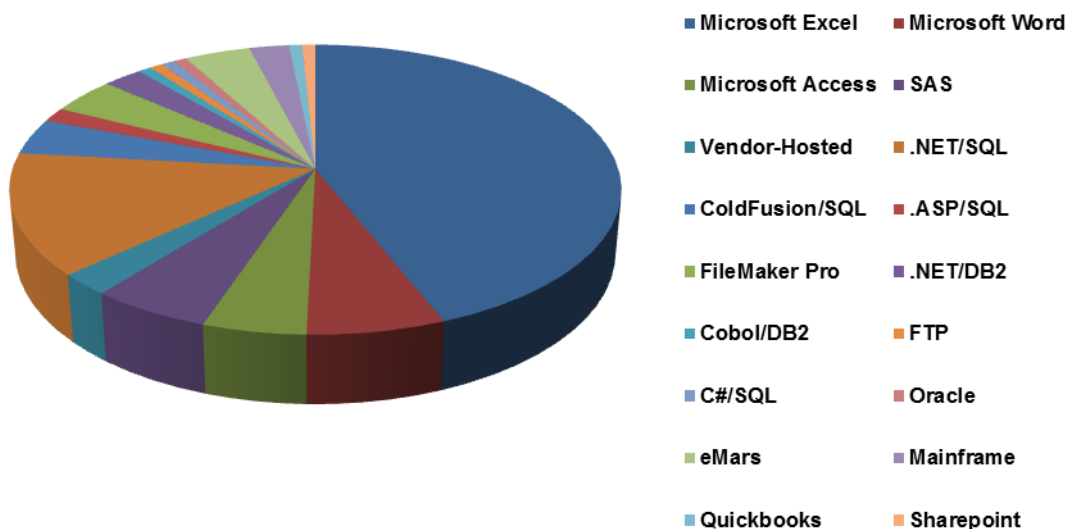
In addition, COT observed many large and significant systems within KDE that are currently in production, on schedule for upgrading, or being enhanced. COT did not eliminate these systems from its analysis, but determined that these systems are secure and steps in the right direction for KDE's consolidation and elimination of redundancy efforts.

Below, you will find the systems analysis and information evaluated by COT. This data is the basis for COT's evaluations and recommendations. For information specific to each office within KDE, please refer to the consolidated "Office Summary Recommendations" document or the individual portfolio created for each office.

KDE System Analysis

KDE System Platforms

Legend: Microsoft Excel, Microsoft Word, Microsoft Access, SAS, Vendor-Hosted, .NET/SQL, ColdFusion/SQL, .ASP/SQL, FileMaker Pro, .NET/DB2, Cobol/DB2, FTP, C#/SQL, Oracle, eMars, Mainframe, Quickbooks, Sharepoint

Commissioner Holliday Recommendations

Through analysis of the KDE offices, COT has observed that one of the most robust systems available to the offices is Infinite Campus. The most problematic issues that COT discovered throughout the interviews with each office and the conversations around Infinite Campus were:

- Lack of accurate information in the system entered by the districts
- Lack of training for the individuals using Infinite Campus (specific to their job functions)
- Lack of feedback on the development and enhancements currently in process with Infinite Campus (leaving the offices and staff frustrated)
- Lack of mandatory use of the system and its functionalities

Due to the issues listed above, many of the intended users of the system have found other resources and created additional systems to record the information needed to administer their daily work functions. COT recommends a mandatory use of the system and its functionalities. Below you will find recommendations specific to Infinite Campus and training for the KDE staff.

System Recommendations for Infinite Campus

1. New process flow (integrations of Infinite Campus with SAS, MUNIS, etc.), if possible, to integrate "speaking" of the systems and information exchange.

2. Training manual for Infinite Campus users (electronic and paper), with an assigned number of copies for districts to distribute to the Infinite Campus users

3. Internal support team for Infinite Campus, since the number of users and activity is going to increase with the mandatory use of the system. This would include the following:

   - Internal KDE staff trained on the system, wherein they have the access to provide daily troubleshooting and administrative tasks that get reported by the districts

   - An Infinite Campus liaison at the Vendor for training/issues to support the KDE staff in case there is something that they cannot provide assistance with

   - Quarterly audits for the 1st year, bi-annual for the 2nd year, and annually thereafter to determine that the system is being used appropriately within the districts and collect feedback from users on Infinite Campus.

4. Research SIF Associations and the vision of standardizing applications within state systems nationwide. This association has piqued interest from individual districts in states all over the United States. The main goal of the association is to ensure that data systems work together and free up educators to do what they do best: teach.

Administrative Recommendations for Infinite Campus

1. Conference held by Commissioner Holliday with two representatives from each district, specifically the Superintendent and an assigned person who will be dedicated to Infinite Campus responsibilities. The assigned individual from each district (appointed by the Superintendent) will be responsible for monitoring the staff within their district, ensuring that the district personnel perform the mandatory/designated tasks for their job function within the system. The conference will need to be held in a centralized location and should be in-person and mandatory for each district. This will express the importance of the consolidation efforts and use of the Infinite Campus system.

2. Staff training for Infinite Campus with cross-training at the District level.

3. Establish specific timetable for Infinite Campus data updates within each district user's work duties. Organize each user's responsibilities for updating the system in collaboration with

their job description and create an accountability/responsibility chart for each district with names, system updating assignments, etc. (i.e. teachers, administrators, district coordinators). This should be consistently updated and sent to the State-level Administrator of Infinite Campus, as well.

4. Training and assurances from/for KDE's program staff to help reduce or eliminate the many requests (for mostly the same information) to districts. KDE will need to develop an action plan with timetable that shows when district information is required for each program area, and exactly what information is required.

5. Loss of funding for failure to comply with new guidelines. This may not be a necessary action if the importance of system use is portrayed in an understanding manner to the districts, explaining the issue that the State-level employees are having in acquiring accurate information and the impact to district funding if incorrect data is provided to the federal agencies. This, or something of this sort, may be a useful tactic to ensure performance.

COT has enjoyed the opportunity to work closely with KDE and provide analysis to assist with the operational data systems throughout each office. COT would like to thank each interviewee and the KDE staff for being helpful, available, responsive, and supportive throughout the evaluation. Thank you from the COT staff and please feel free to contact us with any questions or concerns.